

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JC20 Rec'd PCT/PTO 14 OCT 2005

Applicant: Karola Richter et al.

Serial No:

Art Unit:

Filing Date:

Title: SILICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES  
WITH A DEFINED SLOPE ANGLE, AND PRODUCTION METHOD.

Priority Application: Country: Germany; No.: 103 18 568.2; Filing Date: April 15, 2003

PCT Application: No.: PCT/DE2004/000804; Filing Date: April 15, 2004

October 14, 2005

Attorney's Docket No.: HMP201T1

TRANSMITTAL LETTER

Hon. Commissioner of Patents and Trademarks

BOX PCT

P.O. Box 1450

Alexandria, VA 22313

SIR:

Transmitted herewith for filing is:

&lt;X&gt; Form PTO-1390

<X> Copy of the PCT application No. PCT/DE2004/000804 as published – Publication No.  
WO 2004/093162 (10 pages of the specification, 8 drawing sheets, and 1 tables)<X> English Translation of PCT application No. PCT/DE2004/000804 as filed (21 pages of the  
specification, 8 drawing sheets and 2 tables)

&lt;X&gt; Preliminary Amendment dated October 14, 2005 (5 pages)

<> **Applicant claims small entity status. The fees indicated above are reduced by 1/2**

&lt;X&gt; Request to Accept Patent Application for Entering U.S. National Phase under 35 USC § 371

&lt;X&gt; Claim of Priority

&lt;X&gt; Form PTO-1449

&lt;X&gt; Copy of the International Search Report and copy of references cited therein

&lt;X&gt; Information Disclosure Statement dated October 12, 2005

&lt;X&gt; Information Disclosure Citation

<X> Fees in the amount of **\$600.00** are to be charged to a credit card. Form PTO-2038 is enclosed

(X) The applicant hereby petitions the Commissioner of Patents and Trademarks to extend the time for response to any Office Action outstanding in the above captioned matter as necessary to avoid abandonment of the application. Please charge my deposit account No.11-0224 in the amount required to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to the above account.

(X) The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16, and 1.17, after a mailing of a Notice of Allowance under 37 CFR 1.18 or any additional fees which may be required during the entire pendency of the application, or credit any overpayment, to Acct. No.11-0224. A duplicate copy of this sheet is enclosed. If and only if account funds should be insufficient, immediately contact our associate, Lisa Zumwalt, at (703)415-0579, who will pay immediately to avoid deprivation of rights.

( ) Please charge my Deposit Account No.11-0224 in the amount of \$\_\_\_\_\_. A duplicate copy of this sheet is enclosed.

10/553728

A signature or signatures required for the above recited document(s) is (are) provided herebelow. Such signature(s) also provide(s) ratification for any required signature appearing to be defective in the above recited document(s).

*H.M. Kasper*

JC20 Rec'd PCT/PTO 1 4 OCT 2005

Horst M. Kasper, 13 Forest Drive, Warren, N.J.07059  
Reg. No. 28,559 Tel.(908)526-1717

**Express Mail Certification:** I hereby certify that the correspondence attached hereto is being deposited with the USPS "Express Mail Post Office to Addressee" on the date indicated below and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231,

Deposit Date: 07-14-2005, "Express Mail Mailing Label No": E1 897 604 088 45

Signature: *H. Kasper* Date: 07-14-2005

\*%Pc1:d:trans1(HMP201T1(October 14, 2005(am

FORM PTO-1390 (REV. 11-2000)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER <b>HMP 201</b>	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/553728</b>	
INTERNATIONAL APPLICATION NO. <b>PCT/DE 2004/000804</b>		INTERNATIONAL FILING DATE <b>APRIL 15, 2004</b>		PRIORITY DATE CLAIMED <b>APRIL 15, 2003</b>	
TITLE OF INVENTION <b>SILICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES ...</b>					
APPLICANT(S) FOR DO/EO/US <b>KAROLA RICHTER ET AL.</b>					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
<p>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input checked="" type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</p> <p style="margin-left: 20px;">b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</p> <p style="margin-left: 20px;">c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> is attached hereto.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</p> <p>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> have been communicated by the International Bureau.</p> <p style="margin-left: 20px;">c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</p> <p style="margin-left: 20px;">d. <input type="checkbox"/> have not been made and will not be made.</p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).</p> <p>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <p>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</p> <p>14. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20. <input type="checkbox"/> Other items or information:</p>					

U.S. APPLICATION NO. 10/553728

INTERNATIONAL APPLICATION NO.

ATTORNEY'S DOCKET NUMBER

21. ☐ The following fees are submitted:

## \*BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):

Neither international preliminary examination fee (37 CFR 1.482)  
nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO  
and International Search Report not prepared by the EPO or JPO. .... \$1000.00

International preliminary examination fee (37 CFR 1.482) not paid to  
USPTO but International Search Report prepared by the EPO or JPO ..... \$860.00

International preliminary examination fee (37 CFR 1.482) not paid to USPTO  
but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$710.00

International preliminary examination fee (37 CFR 1.482) paid to USPTO  
but all claims did not satisfy provisions of PCT Article 33(1)-(4) ..... \$690.00

International preliminary examination fee (37 CFR 1.482) paid to USPTO  
and all claims satisfied provisions of PCT Article 33(1)-(4) ..... \$100.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

CALCULATIONS PTO USE ONLY

\$ 600.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30  
months from the earliest claimed priority date (37 CFR 1.492(e)).

\$

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$
Total claims	- 20 =		x \$18.00	\$
Independent claims	- 3 =		x \$80.00	\$
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$270.00	\$
TOTAL OF ABOVE CALCULATIONS =				\$
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$
SUBTOTAL =				\$
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$
TOTAL NATIONAL FEE =				\$
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$
TOTAL FEES ENCLOSED =				\$
				Amount to be refunded: \$ 600.00
				charged: \$

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a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees. A duplicate copy of this sheet is enclosed.c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 11-0224. A duplicate copy of this sheet is enclosed.d. ☒ Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Horst M. Kasper  
13 Forest Drive  
Warren, N.J. 07059

SIGNATURE

HORST M. KASPER

NAME

28,559

REGISTRATION NUMBER

Effective on 12/08/2004.  
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2005

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

Complete **10/553728**

Application Number **PCI/DE 2004/006128**  
Filing Date **April 15, 2004**  
First Named Inventor **KARLA RICHTER**  
Examiner Name  
Art Unit  
Attorney Docket No. **HMP 201**

### METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):  
☒ Deposit Account Deposit Account Number: **11-0224** Deposit Account Name: **HORST M. KASPER**

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee  
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

### FEE CALCULATION

#### 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	<b>\$600.00</b>

#### 2. EXCESS CLAIM FEES

##### Fee Description

Each claim over 20 (including Reissues)

Fee (\$)  
50

Small Entity Fee (\$)  
25

Each independent claim over 3 (including Reissues)

200

100

Multiple dependent claims

360

180

Total Claims Extra Claims Fee (\$)

- 20 or HP = x = Fee Paid (\$)

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Extra Claims Fee (\$)

- 3 or HP = x = Fee Paid (\$)

HP = highest number of independent claims paid for, if greater than 3.

#### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$)

- 100 = / 50 = (round up to a whole number) x = Fee Paid (\$)

#### 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Fees Paid (\$)

Other (e.g., late filing surcharge):

**\$600.00**

#### SUBMITTED BY

Signature **Horst M. Kasper** Registration No. **28,559** Telephone **908 526 1717**  
Name (Print/Type) **HORST M. KASPER** Date **10/14/05**

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

8 / 10/15

10/553728

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Karola Richter et al.

Serial No:

Art Unit:

JC20 Rec'd PCT/PTO 1 4 OCT 2005

Filing Date:

Title: SILICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES  
WITH A DEFINED SLOPE ANGLE, AND PRODUCTION METHOD.

Priority Application: Country: Germany; No.: 103 18 568.2; Filing Date: April 15, 2003

PCT Application: No.: PCT/DE2004/000804; Filing Date: April 15, 2004

October 14, 2005

Attorney's Docket No.: HMP201R1

**REQUEST TO ACCEPT PATENT APPLICATION FOR ENTERING  
UNITED STATES NATIONAL PHASE UNDER 35 USC §371**

Hon. Commissioner of Patents and Trademarks

Box PCT

P.O. Box 1450

Alexandria, VA 22313

SIR:

A patent application related to the above identified application was filed on April 15, 2004 under the PCT Treaty under the docket number PCT/DE2004/000804. English translation of the originally filed PCT application PCT/DE2004/000804 is enclosed with this filing.

It is respectfully requested that the present application be treated as an application filed under the Section 35 U.S.C. § 371 for transferring a PCT application PCT/DE2004/000804, naming the United States, into the national phase and that the present application be granted any and all benefits and in particular those benefits relating to a priority recognition of prior filings under jurisdiction of treaty members and available under the Patent Cooperation Treaty (Washington Treaty), the Paris Convention

Treaty, and under the United States Code based on the filing under the  
 Patent Cooperation Treaty of PCT application PCT/DE2004/000804.

If there should be any problems in granting the benefits available under the Patent Cooperation Treaty and/or 35 USC §371 based on such items as incompleteness of application, excessive time delays or defective application papers, then it is alternatively respectfully requested that prior to the expiration through abandonment of a filing under 35 USC §371 and under charging the required fees from deposit account, the present application be treated as an application and/or continuation application filed at a time required under any one of the sections 35 U.S.C. §111, 35 U.S.C. §363, and/or 35 U.S.C. §365(c) as applicable and that the present application be treated as a continuation or continuation-in-part application of the PCT application PCT/DE2004/000804.

Recognition of PCT national phase status or, respectively, continuation or continuation-in-part status under the PCT Treaty and/or of the claimed priority dates of April 15, 2003 is respectfully requested for the patent application documents in the above captioned matter.

Respectfully submitted,  
 Karola Richter et al.

By: *Horst M. Kasper*  
 Horst M. Kasper, their attorney,  
 13 Forest Drive, Warren, N.J. 07059  
 Tel.: (908) 526-1717 Fax: (908) 526-6977  
 Reg. No. 28,559; Docket No.: HMP201

10/553728

JC20 Rec'd PCT/PTO 1 4 OCT 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Karola Richter et al.

Serial No:

Art Unit:

Filing Date:

Title: SILICON SUBSTRATE COMPRISING POSITIVE ETCHING PROFILES  
WITH A DEFINED SLOPE ANGLE, AND PRODUCTION METHOD.

Priority Application: Country: Germany; No.: 103 18 568.2; Filing Date: April 15, 2003

PCT Application: No.: PCT/DE2004/000804; Filing Date: April 15, 2004

October 14, 2005

Attorney's Docket No.: HMP201CP

CLAIM OF PRIORITY

Hon. Commissioner of Patents and Trademarks

Box PCT

P.O. Box 1450

Alexandria, VA 22313

Sir:

Pursuant to Title 35, United States Code, Section 119 (1952), the undersigned hereby claims the benefit of the filing date of a prior foreign patent application forming a basis of the PCT application viz.:

Country: GERMANY

Application No.: 103 18 568.2

Date of Filing: April 15, 2003

In support of this claim, a certified copy of the aforementioned foreign patent applications is believed to have been submitted by the World Intellectual Property Organization and should have been received by the United States Patent and Trademark Office prior to the expiration of 20, or respectively 30, months from the first priority date of the application.



10/553728

Respectfully submitted,

JC20 Rec'd PCT/PTO 14 OCT 2005

Karola Richter et al.

By:

*Horst M. Kasper*

Horst M. Kasper, their attorney,

13 Forest Drive, Warren, N.J. 07059

Tel.: (908) 757-2839 Fax: (908) 668-5262

Reg. No. 28559; Docket No.: HMP201

\*%optn:pctnat:2(HMP201R1(October 14, 2005(am